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(54) **PEDICLE SCREW WITH REVERSE SPIRAL CUT AND METHODS THEREOF**

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CPC **A61B 17/863** (2013.01); **A61B 17/864** (2013.01); **A61B 17/8625** (2013.01); **A61B 17/7037** (2013.01)

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See application file for complete search history.

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(57) **ABSTRACT**

A pedicle screw with reverse spiral cut that allows for increased loading on a bone and increased osteointegration through automatic and self-managed expansion after the bone screw is inserted into the bone. The bone screw may be a fixation device comprising an elongated body having proximal and distal ends, said elongated body including an outer surface adapted to penetrate and anchor within a bone, and a head affixed to the distal end of the elongated body and adapted to receive a drive component, wherein the outer surface of the elongated body comprises threads extending from the outer surface in a first direction, and further wherein at least a portion of the outer surface of the elongated body comprises a reverse spiral cut into the outer surface in a second direction.

18 Claims, 3 Drawing Sheets

